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EXAMINER

PORTKA, GARY J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,776	Applicant(s) SCHLIMMER ET AL.	
	Examiner Gary J. Portka	Art Unit 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-38 are pending.

Response to Arguments

2. Applicant's arguments filed January 14, 2008 have been fully considered but they are not persuasive. Applicants have apparently disregarded Examiner's arguments of the previous two actions, without pointing the supposed errors therein, reproduced here:

3. "Applicants have argued that Gates does not disclose a policy as claimed that is cached, nor a cache digest as claimed. Examiner disagrees and maintains that these broadly recited limitations may be read on the reference. A policy may be considered simply the "behavior" of the object, or rather the method or functions performed thereby. The code which performs or executes the object is cached at the client. The digest may be considered any changes that must be made to synchronize objects. Clearly changes to any object must be tracked, stored, or otherwise accounted for in order to be able to transmit some minimum amount of changes to synchronize objects, and this accounting may be considered a policy digest as recited, since it would identify whether the client object is synchronized."

4. "Applicants have argued that the policies of Gates apply to the objects, and not to clients as claimed. However, since objects may be associated with clients, for example by being copied into that clients local address space, the policies apply to the clients associated with the object, to the extent claimed."

5. Thus the recited policies are not equated with the policies of Gates as interpreted by Applicant. The term "policy" is a common term used to signify a broad range of uses,

and Examiner maintains the position, absent any evidence to the contrary, that the “behavior” of an object as disclosed in Gates may be interpreted as a policy. It is further maintained that this behavior is cached at the client of Gates, that a request includes a digest of that behavior when the request is a synchronization operation, and that since any object at a client “applies” to that client, the policy (the objects behavior) applies to that client.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 4, 6-13, 15-18, 20-23, 25, 26, 28, 29 & 31-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Gates et al. (US Patent # 6,430,576), herein Gates.

8. As per Claim 1, Gates discloses a method comprising: *generating a policy digest* (i.e., differences in copies of the objects) *for a cached policy that applies to a client* [i.e., the method or behavior of an object, as used by or at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], *the policy digest identifying at least one assertion the client is complying with* [whether objects are synchronized, Column 6, Lines 45-67]; *and including the policy digest in a request by the client to access a resource* [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].

9. As per Claim 3, Gates further discloses the method of claim 1, wherein generating the policy digest includes encoding a bit vector identifying selected assertions from the cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].

10. As per Claim 4, Gates further discloses the method of claim 1, wherein generating the policy digest includes reading an assertion from the policy, assigning a bit value to the assertion, and writing the bit value to a bit vector [Column 6, Lines 36-60 & Column 7, Lines 50-61]. *Examiner understands the user-defined mapping of the objects, as taught by Gates and described in Column 6, Lines 37-44, which contain a mutation of specific conditions for the flexible policy are functionally equivalent to the 'assertions' claimed by Applicant.*

11. As per Claim 6, Gates further discloses the method of claim 1, further comprising: incrementing a counter each time the cached policy is used; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60]. *Examiner emphasizes one such policy assertion, as taught by Gates, includes measuring the number of requests and comparing to a limit (e.g. "10 messages").*

12. As per Claim 7, Gates further discloses the method of claim 1, further comprising: incrementing a counter for the cached policy when a fault is received at the client in response to using the cached policy; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60 &

Column 9, Lines 32-48]. *Examiner understands Gates to replace data upon a fault occurring or “when it is needed” in the local object space.*

13. As per Claim 8, Gates further discloses the method of claim 1, further comprising logging a diagnostic event when a fault is received at the client to identify a system problem [Column 9, Lines 49-67].

14. As per Claim 9, Gates discloses *a method comprising: extracting at a host a policy digest (i.e., differences in copies of the objects) identifying a cached policy applying to a client (i.e., the method or behavior of an object at a client), the policy digest included in a request to access a resource* [see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Line 56 to col 4 line 2, & Column 6, Lines 36-44 and 61-67]; *and denying access to the resource if the policy digest identifies an invalid policy* [“No” branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].

15. As per Claim 10, Gates further discloses the method of claim 9, further comprising issuing a fault for the client if the policy digest identifies an invalid policy [Column 9, Lines 32-48].

16. As per Claim 11, Gates further discloses the method of claim 9, further comprising decoding the policy digest [Column 7, Lines 50-61]. Examiner understands that the remote resource must decode the ‘mutations of objects’ in order to provide the client with any response to include requested data.

17. As per Claim 12, Gates further discloses the method of claim 9, further comprising decoding a bit vector of the cached policy [Column 6, Lines 61-67 & Column

7, Lines 15-24]. Examiner understands that transferring encoded information to the server, or host, would require decoding the data before use.

18. As per Claim 13, Gates further discloses the method of claim 9, further comprising reading an assertion from the policy digest [Column 6, Lines 45-60].

19. As per Claim 15, Gates discloses *a system comprising: a policy digest (i.e., differences in copies of the objects) identifying at least one cached policy that applies to a client* [i.e., the method or behavior of an object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67]; *and a messaging module denying access to a resource if the policy digest identifies an invalid policy for the resource* ["No" branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].

20. As per Claim 16, Gates further discloses the system of claim 15, wherein the messaging module extracts the policy digest from a message requesting access to the resource [Column 7, Lines 50-61].

21. As per Claim 17, Gates further discloses the system of claim 15, wherein the messaging module decodes the policy digest [Column 7, Lines 50-61].

22. As per Claim 18, Gates further discloses the system of claim 15, wherein the policy digest is a bit vector of a cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].

23. As per Claim 20, Gates further discloses the system of claim 15, wherein the policy digest identifies at least one selected assertion [Column 6, Lines 45-60].

24. As per Claim 21, Gates discloses *a system comprising: a policy digest (i.e., differences in copies of the objects) for a cached policy that applies to a client [i.e., the method or behavior of an object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], the policy digest identifying at least one assertion the client is complying with [whether objects are synchronized, Column 6, Lines 45-67]; and a messaging module including the policy digest in a request by the client to access a resource [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].*

25. As per Claim 22, Gates further discloses the system of claim 21, wherein the messaging module encodes the policy digest [Column 6, Lines 36-60 & Column 7, Lines 50-61].

26. As per Claim 23, Gates further discloses the system of claim 21, wherein the policy digest is a bit vector of a cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].

27. As per Claim 25, Gates further discloses the system of claim 21, wherein the policy digest identifies at least one assertion selected by the client [Column 6, Lines 45-60].

28. As per Claim 26, Gates discloses *a computer program product encoding a computer program for executing on a computer system a computer process, the computer process comprising: generating a policy digest (i.e., differences in copies of the objects) for a cached policy that applies to a client [i.e., the method or behavior of an*

object at a client, see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67], *the policy digest identifying at least one assertion the client is complying with* [whether objects are synchronized, Column 6, Lines 45-67]; *and including the policy digest in a request by the client to access a resource* [col. 3 line 67 to col. 4 line 2, Column 6, Lines 61-67].

29. As per Claim 28, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises encoding a bit vector of the cached policy [Column 6, Lines 36-60 & Column 7, Lines 50-61].

30. As per Claim 29, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises reading an assertion from the policy, assigning a bit value to the assertion, and writing the bit value to a bit vector [Column 6, Lines 36-60 & Column 7, Lines 50-61].

31. As per Claim 31, Gates further discloses the computer program product of claim 26, wherein the computer process further comprises: incrementing a counter each time the cached policy is used; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60].

32. As per Claim 32, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises: incrementing a counter for the cached policy when a fault is received at the client in response to using the cached policy; and removing the cached policy from a cache at the client when the counter exceeds a limit value [Column 6, Lines 36-60 & Column 9, Lines 32-48].

33. As per Claim 33, Gates further discloses the computer program product of claim 26 wherein the computer process further comprises triggering a diagnostic event when a fault is received at the client [Column 9, Lines 49-67].

34. As per Claim 34, Gates discloses *a computer program product encoding a computer program for executing on a computer system a computer process, the computer process comprising: extracting at a host a policy digest (i.e., differences in copies of the objects) identifying a cached policy that applies to a client (i.e., the method or behavior of an object at a client), the policy digest included in a request to access a resource* [see Abstract, col. 1 lines 21-25 and 62-66, Column 3, Lines 56-66 & Column 6, Lines 36-44 and 61-67]; *and denying access to the resource if the policy digest identifies an invalid policy* ["No" branch of Figure 3, #304, Column 7, Lines 1-14 & 50-61].

35. As per Claim 35, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises decoding the policy digest [Column 7, Lines 50-61].

36. As per Claim 36, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises decoding a bit vector of the cached policy [Column 7, Lines 50-61].

37. As per Claim 37, Gates further discloses the computer program product of claim 34 wherein the computer process further comprises reading an assertion from the policy digest [Column 6, Lines 45-60].

Claim Rejections - 35 USC § 103

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. Claims 2, 5, 14, 19, 24, 27, 30 & 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gates et al. (US Patent # 6,430,576) as applied to claims 1, 9, 15, 21, 26 & 34 above, and further in view of Atkinson et al. (US Patent # 6,519,764), herein Atkinson.

40. Gates does not expressly disclose generating or using a hash of the policy digest. However, Atkinson discloses a hash as claimed by applicant:

41. As per Claim 2, Atkinson further discloses the method of claim 1, wherein generating the policy digest includes generating a hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

42. Gates and Atkinson are analogous art because they are from similar problem solving areas: data object identification to distinguish appropriate resources. At the time of invention, it would have been obvious to a person of ordinary skill in the art to apply the hashing functions, taught by Atkinson, with the cache policy system taught by Gates. The suggestion/motivation for doing so would have been to bind source information to a meaningful moniker which encapsulates the referenced data, as disclosed by Atkinson in Column 9, Lines 1-6. The benefit of such information binding is

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to reduce confusion between different policies or subsequent versions of similar policies.

43. As per Claim 5, Atkinson further discloses the method of claim 1, wherein generating the policy digest includes generating a hash of the cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].

44. As per Claim 14, Atkinson further discloses the method of claim 9, further comprising reading a row hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

45. As per Claim 19, Atkinson further discloses the system of claim 15, wherein the policy digest is a row hash of a normalized policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

46. As per Claim 24, Atkinson further discloses the system of claim 21, wherein the policy digest is a row hash of a normalized policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

47. As per Claim 27, Atkinson further discloses the computer program product of claim 26 wherein the computer process further comprises generating a hash of the cached policy [Column 11, Lines 17-23 & Column 28, Lines 39-63].

48. As per Claim 30, Atkinson further discloses the computer program product of claim 26 wherein the computer process further comprises generating a row hash of the

cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].

49. As per Claim 38, Atkinson further discloses the computer program product of claim 34 wherein the computer process further comprises reading a row hash of the cached policy if the cached policy is normalized [Column 11, Lines 17-23 & Column 28, Lines 39-63].

Conclusion

50. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

51. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary J Portka/
Primary Examiner, Art Unit 2188

May 3, 2008